

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A *PERIPATUS* FROM GUATEMALA.

BY T. D. A. COCKERELL.

No *Peripatus* has hitherto been known from Guatemala, but Mr. E. Bethel, the well-known naturalist of Denver, when recently at Puerto Barrios, found a specimen which he has kindly placed in my hands for description. It will later be transmitted to the U. S. National Museum.

***Peripatus (Epiperipatus) biolleyi* Bouvier, var. *betheli* v. nov.**

Female.—Length 34 mm., rather slender, width in middle about $4\frac{1}{2}$ mm.; thirty pairs of legs; above uniform dark wood brown, without markings; antennæ blackish; ventral surface pallid, with a brownish-lilac tint; body densely tuberculate, the transverse folds fairly distinct, but in places obscured by the irregularity of the tubercles or papillæ; laterally, however, the folds are as well defined as dorsally; no median dorsal line; many of the papillæ are elongate and conical; accessory papillæ few, but primary ones very diverse in size; foot-pads and nephridial tubercles essentially as in *biolleyi*; nephridial tubercle between the third and fourth pads, independent, the fourth pad well developed, not divided; all the pads large and broad, as in *biolleyi*; outer blade of mandibles as in *biolleyi*; inner blade nearly as in *biolleyi*; the peculiar second (accessory) denticle shaped as in *biolleyi*, and the third (rudimentary) one also as figured by Bouvier, except that the angular point is more pronounced; the row of small teeth beyond consists of 9, instead of 10 or 11 as in *biolleyi*.

Peripatus biolleyi was described from near San José, Costa Rica, on the divide between the Atlantic and Pacific slopes, at an altitude of 1,161 meters. Other specimens were found on the Pacific slope at an altitude of 250 meters. The species has not been found outside of Costa Rica, but a specimen of *Peripatus* having 30 pairs of legs was found in British Honduras, and is briefly noted by Brues in Bull. Mus. Comp. Zool., LIV (1911), p. 317. This latter was so poorly preserved that it could not be determined, but I suppose that in all probability it belongs to *betheli*.

Considering the locality of Mr. Bethel's *Peripatus*, at sea level on the Atlantic side of Guatemala, 500 miles from the locality of *P. biolleyi*, we should expect it to be a distinct species. It differs from *biolleyi* strikingly in color, and slightly in the teeth. It also certainly seems to have the papillæ more irregularly placed, quite, in fact, as in the otherwise diverse *P. isthmicola*. This character is not so satisfactory as one could wish, owing to a certain lack of uniformity in the papillæ of different parts of the body.

On the other hand, the peculiar accessory denticles of the inner blade of the mandibles are of the *biolleyi* type, and no other *Peripatus* has anything very like this. The same may be said of the arrangement of footpads and nephridial tubercles. Bouvier notes that the original *P. biolleyi*, from near San José, was yellowish red (jaune roux), whereas the specimens from a lower altitude on the Pacific slope were marked like *P. trinitatis*, with a series of dorsal losenges. Is it not probable that there are two races in Costa Rica, one belonging to the highlands, the other to the low country on the Pacific side? Mr. Bethel's animal presumably represents a special race or subspecies of the tropical Atlantic coast-region, which may extend southward as far as Costa Rica.

Mr. Bethel's specimen was in process of moulting, and the new skin exposed was consequently very fresh and well colored, so that there is no doubt concerning the natural colors of the animal.